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IN THE CLAIMS

1 (Previously Presented). A method comprising:

partitioning a non-volatile storage media;

storing data in a first partitioned section of the non-volatile storage media;

storing, in a second partitioned section of the non-volatile storage media,

metadata corresponding to the data stored in the first partitioned section of the non-volatile storage media; and

accessing the second partitioned section upon a system boot.

- 2 (Original). The method of claim 1, wherein storing the metadata as packed metadata block.
 - 3 (Original). The method of claim 1, wherein the partitioning is logical.
- 4 (Original). The method of claim 1, wherein storing cache data in the first partitioned section.
- 5 (Original). The method of claim 4, further comprising:

 updating the data and metadata atomically when a line of cache data in the first
 partitioned section is changed.
 - 6 (Original). The method of claim 1, further comprising: allocating a portion of a mass storage device as the non-volatile storage media.
 - 7 (Previously Presented). A non-volatile memory comprising:
 - a first section to store data; and
- a second section partitioned from the first section, the second section to store metadata for the data stored in the first section and wherein the second partitioned section is accessed upon a system boot.

- 8 (Original). The memory of claim 7, wherein the second section is to store the metadata as packed metadata blocks.
- 9 (Original). The memory of claim 7, wherein the partitioning of the first section and the second section is logical.
- The memory of claim 7, wherein the non-volatile memory 10 (Previously Presented). is a portion of a mass storage device.
- 11 (Original). The memory of claim 10, wherein the mass storage device is one of a disk drive, a Flash memory, a ferroelectric random access memory, or a polymer ferroelectric random access memory.
- 12 (Original). The memory of claim 7, wherein the non-volatile memory is a cache memory.
 - A system comprising: 13 (Previously Presented).
- a non-volatile storage media having a first section and a second section partitioned from the first section;
- a memory control hub to cause the first section to store data and the second section to store metadata for the data stored in the first section; and
- a processor coupled to the memory control hub to access said second section on system boot.
- 14 (Original). The system of claim 13, wherein second section is to store the metadata as packed metadata blocks.
 - 15 (Original). The system of claim 13, wherein the partition is logical.
- The system of claim 15, further comprising a mass storage 16 (Previously Presented). device and wherein a portion of the massive storage device is the non-volatile storage media.

17 (Original). The system of claim 13, wherein the non-volatile storage media is a cache memory.

Claims 18-21 (Canceled).

- 22 (Previously Presented). A program loaded in a computer readable medium comprising:
- a first group of computer instructions to logically partition a non-volatile storage media;
- a second group of computer instructions to store data in a first partitioned section of the non-volatile storage media;
- a third group of computer instructions to store metadata for the data in a second partitioned section of the non-volatile storage media; and
- a fourth group of instructions to access the second partitioned during a system boot.
- 23 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store the metadata as packed metadata blocks.
- 24 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store cache data as the data in the first partitioned section.
- 25 (Original). The program of claim 24, further comprising: computer instructions to update the data and metadata atomically when a line of cache data in the first partitioned section is changed.
- 26 (Original). The program of claim 24, further comprising:

 computer instructions to access a line of the second partitioned section to read
 metadata for the cache data in the first partitioned section.

- 27 (Previously Presented). A program loaded in a computer readable medium comprising:
- a first group of computer instructions to logically partition a non-volatile storage media;
- a second group of computer instructions to store cache data in a first partitioned section of a non-volatile storage media;
- a third group of computer instructions to store, in a second partitioned section of the non-volatile storage media, metadata corresponding to the cache data stored in the first partitioned section; and
- a fourth group of instructions to access the second partitioned section to determine the state of the cache data in a system boot.
- 28 (Original). The program of claim 27, wherein the third group of computer instructions includes computer instructions to store the metadata as packed metadata blocks.
- 29 (Original). The program of claim 27, further comprising:

 computer instructions to update the cache data and metadata atomically when a line of cache data in the first partitioned section is changed.
- 30 (Original). The program of claim 27, further comprising:

 computer instructions to allocate a portion of a mass storage device as the nonvolatile storage media.

Claims 31-44 (Canceled).